

Division of Facilities Construction and Management

STANDARD LOW BID PROJECT – INVITATIONAL Project Budgets \$50,000 - \$100,000

November 3, 2006

Ogden 2nd District Court Building Window Tinting Administrative Office of the Courts

Ogden, Utah

DFCM Project Number 06143150

Scott P. Evans Architect & Associates P.C.

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at http://dfcm.utah.gov or are available upon request from DFCM.

DFCM General Conditions dated May 25, 2005. DFCM Application and Certification for Payment dated May 25, 2005.

Technical Specifications:

Drawings:

INVITATION TO BID

Only firms that have been invited to submit bids on this project are allowed to bid on this project.

Sealed bids will be received by the Division of Facilities Construction and Management (DFCM) for:

OGDEN 2ND DISTRICT COURT BUILDING WINDOW TINTING ADMINISTRATIVE OFFICE OF THE COURTS, OGDEN, UTAH DFCM PROJECT NO: 06143150

<u>Company</u>	<u>Contact</u>	<u>Fax</u>
Pro Tint	Gary Stam	801-974-9890
Architectural Window Film	Joel Marler	801-415-1794
Glamor Glaze	Joe Phalen	801-776-5613

Bids will be in accordance with the Contract Documents that will be available on Friday, November 3, 2006, on the DFCM web page at http://dfcm.utah.gov. For questions regarding this project, please contact Brent Lloyd, DFCM, at 801-538-3471. No others are to be contacted regarding this bidding process. The construction budget for this project is \$80,000.00.

A **mandatory** pre-bid meeting will be held at 9:00 A.M. on Tuesday, November 7, 2006 at Ogden 2nd District Courts Building, located 2525 Grant Ave. Ogden, Utah. All bidders wishing to bid on this project are required to attend this meeting.

Bids will be received until the hour of 3:30 PM on Tuesday, November 14, 2006 at DFCM, 4ll0 State Office Building, Salt Lake City, Utah 84114. Bids will be opened and read aloud in the DFCM Conference Room, 4110 State Office Building, Salt Lake City, Utah. NOTE: Bids must be received at 4110 State Office Building by the specified time.

Bid security, in the amount of five percent (5%) of the bid, must be submitted as stated in the Instruction to Bidders.

The Division of Facilities Construction and Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of DFCM.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT Joanna Fisher, Contract Coordinator 4110 State Office Building, Salt Lake City, Utah 84114

PROJECT DESCRIPTION

The scope of this project covers the installation of shatter resistant window film to the interior window surface of the Ogden 2nd District Courts Building per plans and specifications provided. The window film shall be **3M Scotchshield S25NVR400** Ultra Safety and Security Window Film

DFCM FORM 1a 081506 4





Division of Facilities Construction and Management

PROJECT SCHEDULE

PROJECT NAME: Ogden 2nd District Courts Building Window Tinting, Administrative Office of the Courts, Ogden, Utah

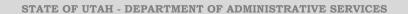
DFCM PROJECT NO. 06143150

Event	Day	Date	Time	Place
Bidding Documents	Friday	November 3,	8:00 AM	DFCM web site *
Available		2006		
Mandatory Pre-bid	Tuesday	November 7,	9:00 AM	Ogden 2 nd District
Site Meeting		2006		Courts Building * *
Last Day to Submit	Wednesday	November 8,	4:00 PM	Brentlloyd@utah.gov
Questions		2006		
Final Addendum Issued	Thursday	November 9,	4:00 PM	DFCM web site *
		2006		
Prime Contractors	Tuesday	November 14,	3:30 PM	DFCM, 4110 State
Turn In Bid and Bid		2006		Office Bldg, SLC, UT
Bond / Bid Opening in				
DFCM Conference				
Room				
Sub-contractor List	Wednesday	November 15,	3:30 PM	DFCM, 4110 State
Due		2006		Office Bldg, SLC, UT
Project Completion		90 Days from	12:00 PM	
		Notice to		
		Proceed		

DFCM FORM 1a 081506 5

^{*} DFCM's web site address is http://dfcm.utah.gov

^{**} Ogden 2nd District Courts 2525 Grant Avenue Ogden, Utah 84401





contract.

Division of Facilities Construction and Management

DFCM

BID FORM

NAME OF BIDDER	DATE
To the Division of Facilities Construction and Manag 4110 State Office Building Salt Lake City, Utah 84114	gement
Bidders", in compliance with your invitation for Window Tinting, Administrative Office of the having examined the Contract Documents and the all of the conditions surrounding the construction labor, hereby proposes to furnish all labor, materiaccordance with the Contract Documents as specific.	e site of the proposed Work and being familiar with a of the proposed Project, including the availability of
I/We acknowledge receipt of the following Addenda:	
For all work shown on the Drawings and described in perform for the sum of:	the Specifications and Contract Documents, I/we agree to
	DOLLARS (\$)
(In case of discrepancy, written amount shall govern)	
UNIT PRICE: Cost per square foot for removal of e \$	xisting film and associated window cleaning:
to Proceed, should I/we be the successful bidder, and	omplete within 90 calendar days after receipt of the Notice agree to pay liquidated damages in the amount of \$200.00 Time as stated in Article 3 of the Contractor's Agreement.
This bid shall be good for 45 days after bid opening.	
Enclosed is a 5% bid bond, as required, in the sum of	
The undersigned Contractor's License Number for Ut	ah is
Upon receipt of notice of award of this bid, the under	signed agrees to execute the contract within ten (10) days,

DFCM FORM 1a 081506

unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the

BID FORM PAGE NO. 2

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:	
(Corporation, Partnership, Individual, etc.)	
Any request and information related to Utah I	Preference Laws:
	Respectfully submitted,
	Name of Bidder
	ADDRESS:
	Authorized Signature

INSTRUCTIONS TO BIDDERS

1. <u>Drawings and Specifications, Other Contract Documents</u>

Drawings and Specifications, as well as other available Contract Documents, may be obtained as stated in the Invitation to Bid.

2. Bids

Before submitting a bid, each contractor shall carefully examine the Contract Documents, shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the Contract Documents. If the bidder observes that portions of the Contract Documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Representative and the necessary changes shall be accomplished by Addendum.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Invitation to Bid prior to the deadline for submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. NOTE: A cashier's check cannot be used as a substitute for a bid bond.

3. Contract and Bond

The Contractor's Agreement will be in the form bound in the specifications. The Contract Time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the contract sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for subcontractors will be specified in the Supplementary General Conditions.

4. <u>Listing of Subcontractors</u>

Listing of Subcontractors shall be as summarized in the "Instructions and Subcontractor's List Form", which are included as part of these Contract Documents. The Subcontractors List shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the Contract Documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements is subject to a debarment hearing and may be debarred from consideration for award of contracts for a period of up to three years.

5. Interpretation of Drawings and Specifications

If any person or entity contemplating submitting a bid is in doubt as to the meaning of any part of the drawings, specifications or other Contract Documents, such person shall submit to the DFCM Project Manager a request for an interpretation thereof. The person or entity submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addenda posted on DFCM's web site at http://dfcm.utah.gov. Neither the DFCM nor A/E will be responsible for any other explanations or interpretations of the proposed documents. A/E shall be deemed to refer to the architect or engineer hired by DFCM as the A/E or Consultant for the Project.

6. Addenda

Addenda will be posted on DFCM's web site at http://dfcm.utah.gov. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding.

7. Award of Contract

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of the State of Utah to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

8. <u>DFCM Contractor Performance Rating</u>

As a contractor completes each DFCM project, DFCM, the architect/engineer and the using agency will evaluate project performance based on the enclosed "DFCM Contractor Performance Rating" form. The ratings issued on this project will not affect this project but may affect the award on future projects.

9. <u>Licensure</u>

The Contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

10. Right to Reject Bids

DFCM reserves the right to reject any or all Bids.

11. <u>Time is of the Essence</u>

Time is of the essence in regard to all the requirements of the Contract Documents.

12. Withdrawal of Bids

Bids may be withdrawn on written request received from bidder prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

13. Product Approvals

Where reference is made to one or more proprietary products in the Contract Documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the Contract Documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the A/E. Such written approval must occur prior to the deadline established for the last scheduled addenda to be issued. The A/E's written approval will be in an issued addendum. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the A/E.

14. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the contractor, subcontractor or sub-subcontractor.

15. <u>Debarment</u>

By submitting a bid, the Contractor certifies that neither it nor its principals, including project and site managers, have been, or are under consideration for, debarment or suspension, or any action that would exclude such from participation in a construction contract by any governmental department or agency. If the Contractor cannot certify this statement, attach to the bid a detailed written explanation which must be reviewed and approved by DFCM as part of the requirements for award of the Project.

BID BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

the "Dringing!" and		hereinafter referred t	to as
the "Principal," and under the laws of the State of, with its business in this State and U. S. Department of the Treasury Listed Securities on Federal Bonds and as Acceptable Reinsuring Compa	a, (Circular 5 /0 anies): hereinat	of Companies Holding Certificates of Authority as Accept fter referred to as the "Surety." are held and firmly bound	unto
the STATE OF UTAH, hereinafter referred to as the "Obligee, accompanying bid), being the sum of this Bond to which paradministrators, successors and assigns, jointly and severally, firm	" in the amour yment the Prii mly by these p	nt of \$ (5% of ncipal and Surety bind themselves, their heirs, execur- presents.	f the tors,
THE CONDITION OF THIS OBLIGATION IS SU bid incorporated by reference herein, dated as shown, to enter into	JCH that where	reas the Principal has submitted to Obligee the accompan writing for the	
		Pro	oject.
NOW, THEREFORE, THE CONDITION OF TH execute a contract and give bond to be approved by the Obligee fin writing of such contract to the principal, then the sum of the damages and not as a penalty; if the said principal shall execut performance thereof within ten (10) days after being notified in woold. It is expressly understood and agreed that the liability of the penal sum of this Bond. The Surety, for value received, hereby so for a term of sixty (60) days from actual date of the bid opening	for the faithful ge amount state to a contract are vriting of such the Surety for an stipulates and a	ed above will be forfeited to the State of Utah as liquid nd give bond to be approved by the Obligee for the fair contract to the Principal, then this obligation shall be null ny and all defaults of the Principal hereunder shall be the	tified dated thful l and e full
PROVIDED, HOWEVER, that this Bond is executed as amended, and all liabilities on this Bond shall be determined length herein.		rovisions of Title 63, Chapter 56, Utah Code Annotated, 1 e with said provisions to same extent as if it were copie	
IN WITNESS WHEREOF, the above bounden parties below, the name and corporate seal of each corporate party representative, pursuant to authority of its governing body.		d this instrument under their several seals on the date indic affixed and these presents duly signed by its undersign	
DATED this day of	, 20		
Principal's name and address (if other than a corporation):		Principal's name and address (if a corporation):	
	_ _		
By:		Ву:	
Title:		Title:(Affix Corporate S	
		(Affix Corporate S	Seal)
		Surety's name and address:	
STATE OF)			
) ss		By:	~ *
COUNTY OF			
On this day of, 20, personally whose identity is personally known to me or proved to me on the that he/she is the Attorney-in-fact of the above-named Surety Complied in all respects with the laws of Utah in reference to become acknowledged to me that as Attorney-in-fact executed the same	Company, and oming sole sure	I that he/she is duly authorized to execute the same and	d has
Subscribed and sworn to before me this day of My Commission Expires: Resides at:			
Agazau		NOTARY PUBLIC	
Agency:			
Address:Phone:		Approved As To Form: May 25, 2 By Alan S. Bachman, Asst Attorney Ger	2005 neral





Division of Facilities Construction and

INSTRUCTIONS AND SUBCONTRACTORS LIST FORM

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of <u>ALL</u> first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, on the following basis:

PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- Bidder must list "Self" if performing work itself.

LICENSURE:

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide <u>only</u> materials, equipment, or supplies to a contractor or subcontractor.

BIDDER LISTING 'SELF' AS PERFORMING THE WORK:

Any bidder that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

'SPECIAL EXCEPTION':

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A.Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

INSTRUCTIONS AND SUBCONTRACTORS LIST FORM Page No. 2

GROUNDS FOR DISQUALIFICATION:

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

EXAMPLE:

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.





PROJECT TITLE:

Division of Facilities Construction and

SUBCONTRACTORS LIST FAX TO 801-538-3677

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE
alternates.	ctors as required by the instructions, including sial Exception" in accordance with the instructionately licensed as required by State law.		bid as well as an
	FIRM:		
TE:	SIGNED BY:		

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

FUGITIVE DUST PLAN

The Contractor will fill out the form and file the original with the Division of Air Quality and a copy of the form with the Division of Facilities Construction & Management, prior to the issuance of any notice to proceed.

The Contractor will be fully responsible for compliance with the Fugitive Dust Control Plan, including the adequacy of the plan, any damages, fines, liability, and penalty or other action that results from noncompliance.

Utah Division of Air Quality April 20, 1999

GUIDANCE THAT MUST BE CONSIDERED IN DEVELOPING AND SUBMITTING A DUST CONTROL PLAN FOR COMPLIANCE WITH R307-309-3, 4, 5, 6, 7

Source Information:

1.	Name of your operation (source): provide a name if the source is a construction site.
2.	Address or location of your operation or construction site.
3.	UTM coordinates or Longitude/Latitude of stationary emission points at your operation.
4.	Lengths of the project, if temporary (time period).
5.	Description of process (include all sources of dust and fugitive dust). Please, if necessary, use additional sheets of paper for this description. Be sure to mark it as an attachment.
6.	Type of material processed or disturbed.
7.	Amount of material processed (tons per year, tons per month, lbs./hr., and applicable units).

Destination of product (where will the material produced be used or transported, be specific, provide address or specific location), information needed for temporary relocation applicants.
Identify the individual who is responsible for the implementation and maintenance of fugitive dust control measures. List name(s), position(s) and telephone number(s).
List, and attach copies of any contract lease, liability agreement with other companies that may, or will, be responsible for dust control on site or on the project.

Description of Fugitive Dust Emission Activities (Things to consider in addressing fugitive dust control strategies.)

1.	Type of activities (drilling and blasting, road construction, development construction, earth moving and excavation, handling and hauling materials, cleaning and leveling, etc).
2.	List type of equipment generating the fugitive dust.
3.	Diagram the location of each activity or piece of equipment on site. Please attach the diagram.
4.	Provide pictures or drawings of each activity. Include a drawing of the unpaved/paved road network used to move loads "on" and "off" property.
5.	Vehicle miles travels on unpaved roads associated with the activity (average speed).
6.	Type of dust emitted at each source (coal, cement, sand, soil, clay, dust, etc.)
7.	Estimate the size of the release area at which the activity occurs (square miles). For haul or dirt roads include total miles of road in use during the activity.

Description of Fugitive Dust Emission Controls on Site

Control strategies must be designed to meet 20% opacity or less on site (a lesser opacity may be defined by Approval Order conditions or federal requirements such as NSPS), and control strategies must prevent exceeding 10% opacity from fugitive dust at the property boundary (site boundary) for compliance with R307-309-3.

1.	Types of ongoing emission controls proposed for each activity, each piece of equipment, and haul roads.
2.	Types of additional dust controls proposed for bare, exposed surfaces (chemical stabilization, synthetic cover, wind breaks, vegetative cover, etc).
3.	Method of application of dust suppressant.
4.	Frequency of application of dust suppressant.
5.	Explain what triggers the use of a special control measure other than routine measures already in place, such as covered loads or measures covered by a permit condition (increase in opacity, high winds, citizen complaints, dry conditions, etc).
6.	Explain in detail what control strategies/measures will be implemented off-hours, i.e., Saturdays/Sundays/Holidays, as well as 6 PM to 6 AM each day.

Description of Fugitive Dust Control Off-site

Prevent, to the maximum extent possible, deposition of materials, which may create fugitive dust on public and private paved roads in compliance with R307-309-5, 6, 7.

- 1. Types of emission controls initiated by your operation that are in place "off" property (application of water, covered loads, sweeping roads, vehicle cleaning, etc.).
- 2. Proposed remedial controls that will be initiated promptly if materials, which may create fugitive dust, are deposited on public and private paved roads.

Phone: (801) 536-4000

(801) 536-4099

FAX:

Submit the Dust Control Plan to:

Executive Secretary Utah Air Quality Board POB 144820 15 North 1950 West Salt Lake City, Utah 84114-4820

Fugitive Dust Control Plan Violation Report

When a source is found in violation of R307-309-3 or in violation of the Fugitive Dust Control Plan, the course must submit a report to the Executive Secretary within 15 days after receiving a Notice of Violation. The report must include the following information:

- 1. Name and address of dust source.
- 2. Time and duration of dust episode.
- 3. Meteorological conditions during the dust episode.
- 4. Total number and type of fugitive dust activities and dust producing equipment within each operation boundary. If no change has occurred from the existing dust control plan, the source should state that the activity/equipment is the same.
- 5. Fugitive dust activities or dust producing equipment that caused a violation of R-307-309-3 or the sources dust control plan.
- 6. Reasons for failing to control dust from the dust generating activity or equipment.
- 7. New and/or additional fugitive dust control strategies necessary to achieve compliance with R307-309-3, 4, 5, 6, or 7.
- 8. If it can not be demonstrated that the current approved Dust Control Plan can result in compliance with R307-309-3 through 7, the Dust Control Plan must be revised so as to demonstrate compliance with 307-309-3 through 7. Within 30 days of receiving a fugitive dust Notice of Violation, the source must submit the revised Plan to the Executive Secretary for review and approval.

Submit the Dust Control Plan to:

Executive Secretary Phone: (801) 536-4000 Utah Air Quality Board FAX: (801) 536-4099

POB 144820

15 North 1950 West

Salt Lake City, Utah 84114-4820

Attachments: DFCM Form FDR R-307-309, Rule 307-309

3000/300/	/FVA/	/	/	/
	Project No	 0.		

CONTRACTOR'S AGREEMENT

FOR:
THIS CONTRACTOR'S AGREEMENT, made and entered into this day of, 20, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and, incorporated in the State of and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is
WITNESSETH: WHEREAS, DFCM intends to have Work performed at
WHEREAS, Contractor agrees to perform the Work for the sum stated herein.
NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:
ARTICLE 1. SCOPE OF WORK. The Work to be performed shall be in accordance with the Contract Documents prepared by and entitled ""
The DFCM General Conditions ("General Conditions") dated May 25, 2005 on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.
The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.
ARTICLE 2. CONTRACT SUM. The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of
which is the base bid, and which sum also includes the cost of a 100% Performance Bond and a 100%

CONTRACTOR'S AGREEMENT PAGE NO 2

Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY. The Work shall be
Substantially Complete within () calendar days after the date of the Notice to
Proceed. Contractor agrees to pay liquidated damages in the amount of \$ per day for each day
after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance
with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for
liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because
actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement;
(c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay
damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Invitation to Bid, Instructions to Bidders/ Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

ARTICLE 5. PAYMENT. The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the Contractor requests payment and agrees to

CONTRACTOR'S AGREEMENT PAGE NO. 3

safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

ARTICLE 6. INDEBTEDNESS. Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

ARTICLE 7. ADDITIONAL WORK. It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

ARTICLE 8. INSPECTIONS. The Work shall be inspected for acceptance in accordance with the General Conditions.

ARTICLE 9. DISPUTES. Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT. This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF. The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

ARTICLE 12. INDEMNIFICATION. The Contractor shall comply with the indemnification provisions of the General Conditions.

ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT. The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

ARTICLE 14. RELATIONSHIP OF THE PARTIES. The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT. Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

ARTICLE 16. ATTORNEY FEES AND COSTS. Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

CONTRACTOR'S AGREEMENT PAGE NO. 5

IN WITNESS WHEREOF, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

	CONTRACTOR:				
	Signature	Date			
	Title:				
State of)					
County of	Please type/print name clearly				
On this day of, 20, pers whose identity is personally known to me (or who by me duly sworn (or affirmed), did say the firm and that said document was signed by	proved to me on the basis of satisfactory evi	dence) and			
(CEAL)	Notary Public				
(SEAL)	My Commission Expires				
APPROVED AS TO AVAILABILITY OF FUNDS:	DIVISION OF FACILITIES CONSTRUCTION AND MANAGI	EMENT			
David D. Williams, Jr. Date DFCM Administrative Services Director	Manager Capital Development/Improvements	Date			
APPROVED AS TO FORM: ATTORNEY GENERAL May 25, 2005	APPROVED FOR EXPENDITURE:				
By: Alan S. Bachman Asst Attorney General	Division of Finance	Date			

PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That	he	ereinafter referred to as	the "Principal" and	
	, a corporation organized			
, with its principal office in the City of				
Listed (Circular 570, Companies Holding Certificates of Authorit				
hereinafter referred to as the "Surety," are held and firmly bound un				
	DOLLARS (\$) for the j	payment whereof, the	
said Principal and Surety bind themselves and their heirs, administration	rators, executors, successors and assigns, jointly	y and severally, firmly	by these presents.	
WHEREAS, the Principal has entered into a certain wr	itten Contract with the Obligee, dated the	day of	, 20, to	
construct				
in the County of, State of Utah, Project No Contract is hereby incorporated by reference herein.	, for the approximate sum o	of		
		Dollars (\$), which	
Contract is hereby incorporated by reference herein.				
NOW THEREFORE the and ities of this chilestics	is asset, the triffer and a Daire size 1 shall feliable the			
NOW, THEREFORE, the condition of this obligation				
Contract Documents including, but not limited to, the Plans, Special				
Contract as said Contract may be subject to Modifications or change	ges, then this obligation shall be void; otherwise	e it shall remain in full	force and effect.	
N			. 41 1	
No right of action shall accrue on this bond to or for the	e use of any person or corporation other than th	e state named herein of	me neirs, executors,	
administrators or successors of the Owner.				
The parties agree that the dispute provisions provided in	the Contract Documents and and shall	uto the sole dismute	aduras of the monti	
The parties agree that the dispute provisions provided in	the Contract Documents apply and shall constitu	ute the sole dispute prod	cedures of the parties.	
PROVIDED HOWEVED that this Dand is avacuated	murguent to the Provisions of Title 62 Chapter 5	6 Utah Cada Ammatata	d 1052 as amondad	
PROVIDED, HOWEVER, that this Bond is executed				
and all liabilities on this Bond shall be determined in accordance w	ith said provisions to the same extent as if it we	ere copied at length her	ein.	
IN WITNESS WHEDEOE 41 1 Drive in 1 1 Com		J C	20	
IN WITNESS WHEREOF, the said Principal and Sur	ety nave signed and sealed this instrument this	day of	, 20	
WITNESS OF ATTREET ATION	DDINGIDAL			
WITNESS OR ATTESTATION:	PRINCIPAL:			
<u> </u>				
	Ву:			
	Бу		(Seal)	
	Title:			
	Tiue.			
WITNESS OR ATTESTATION:	SURETY:			
WITNESS OR ATTESTATION:	SURETY:			
	D _{vv} .			
	By: Attorney-in-Fact			
CTATE OF	Attorney-in-Fact		(Seal)	
STATE OF				
) ss. COUNTY OF)				
COUNTY OF)				
On this down of 20			1	
On this day of, 20, personally	appeared before me		, whose	
identity is personally known to me or proved to me on the basis of				
in-fact of the above-named Surety Company and that he/she is du				
reference to becoming sole surety upon bonds, undertakings and ob-	oligations, and that he/she acknowledged to me	that as Attorney-in-fac	t executed the same.	
	20			
Subscribed and sworn to before me this day of				
My commission expires:				
Resides at:				
	NOTARY PUBLIC			
Agency:				
Agent:		Approved As To Fo	rm: May 25 2005	
Address:	——— R _V Δ1s	an S. Bachman, Ass		
Phone:		5. 2401111411, 7155	28	
(1			∠8	

PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That		hereinafter referred to	
and U. S. Department of the Treasury	Listed (Circular 570, Companies	Holding Certificates of Authority as A	authorized to do business in this State Acceptable Securities on Federal Bonds and as
			to as the "Surety," are held and firmly bound unto
Dollars (\$) for	the payment whereof, the said Prince	cipal and Surety bind themselves and the	neir heirs, administrators, executors, successors
and assigns, jointly and severally, firm			,,,,
WHEREAS, the Principal	has entered into a certain written (Contract with the Obligee, dated the	day of, 20,
in the County of	, State of Utah, Project No.	for the approximate sun	n of
incorporated by reference herein.		Dollars (\$	day of, 20, n of), which contract is hereby
NOW, THEREFORE, the	condition of this obligation is such ance with the provisions of Title 63	that if the said Principal shall pay all cl 3, Chapter 56, of Utah Code Annotated	aimants supplying labor or materials to Principa 1953, as amended, and in the prosecution of the
of the Contract or to the Work to be per	formed thereunder, or the specificat ach changes, extensions of time, alt	tions or drawings accompanying same serations or additions to the terms of the	ions of time, alterations or additions to the terms hall in any way affect its obligation on this Bond Contract or to the Work or to the specifications
PROVIDED, HOWEVER all liabilities on this Bond shall be det			66, Utah Code Annotated, 1953, as amended, and e copied at length herein.
IN WITNESS WHEREO	F, the said Principal and Surety ha	ve signed and sealed this instrument th	isday of, 20
WITNESS OR ATTESTATION:		PRINCIPAL:	
		Ву:	(Seal)
		Title:	(500)
WITNESS OR ATTESTATION:		SURETY:	
		Ву:	
STATE OF		Attorney-in-Fact	(Seal)
COUNTY OF) ss	i.		
On this day of	, 20	, personally appeared before me, whose identity is personal	ly known to me or proved to me on the basis or
	as complied in all respects with the	ne laws of Utah in reference to becom	named Surety Company, and that he/she is duly ning sole surety upon bonds, undertakings and
Subscribed and sworn to before me th	s day of	, 20	
My commission expires:			
Resides at:		NOTARY PUBLIC	
Agency:			Approved As To Form: May 25, 2005
Agent:Address:		——	By Alan S. Bachman, Asst Attorney General

Phone: _





Division of Facilities Construction and Management

CHA	ANGE ORDER	: #						
	RACTOR:		PR PR CC	ENCY OR INST OJECT NAME: OJECT NUMBE ONTRACT NUMB TE:	ER:			
								$\overline{}$
	CONSTRUCTION CHANGE	PROPOSAL REQUEST	AMOUNT		DAYS			
	DIRECTIVE NO.	NO.	INCREASE	DECREASE	INCREASE	DEC	CREASE	4
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								-
								7
				Amazonat	Davis		Data	
	ORIGINAL CONTRA			Amount	Days		Date	7
	TOTAL PREVIOUS CHANGE ORDERS TOTAL THIS CHANGE ORDER							
	ADJUSTED CONTRACT							<u>////</u>
shall c indired	and Contractor agree constitute the full accor ct costs and effects relaccope of the Work and	rd and satisfactio ated to, incidenta	n, and complete	adjustment to the	he Contract and	l includ	des all dir	ect and
Contra	actor:					_4_		
Archite	ect/Engineer:					ate		
Agenc	y or Institution:					ate		
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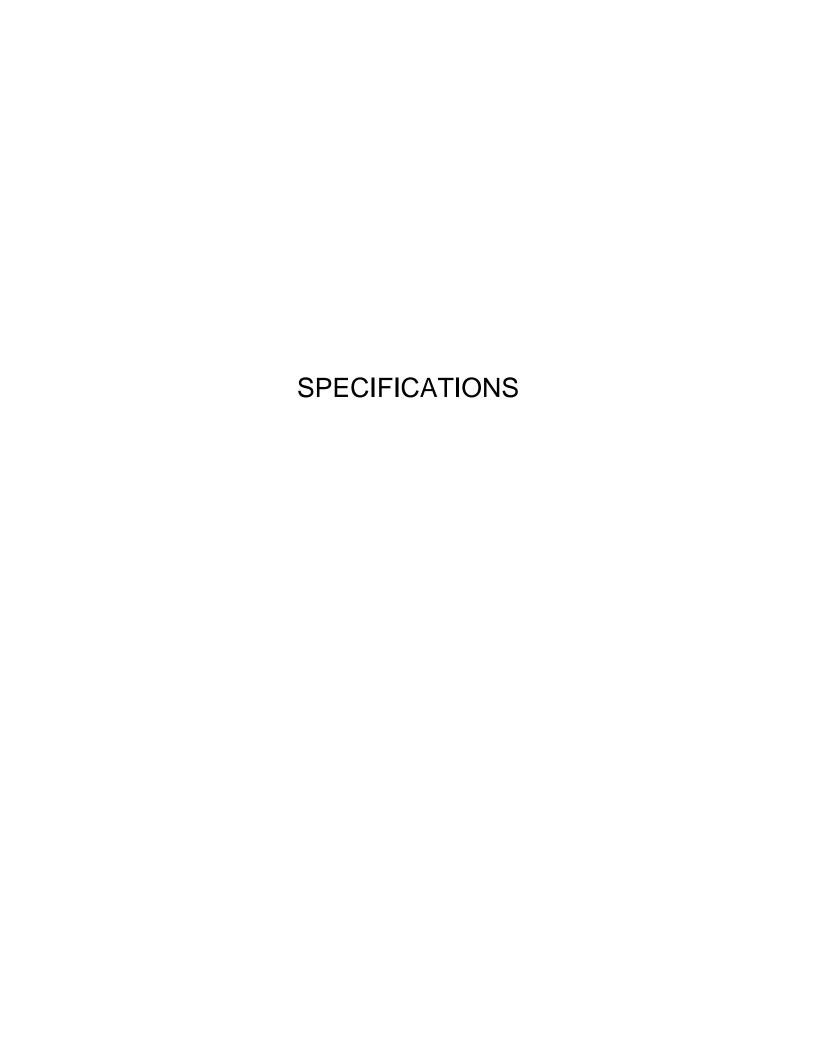


Division of Facilities Construction and Management

DFCM

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT	PROJECT NO:			
AGENCY/INSTITUTION				
AREA ACCEPTED				
The Work performed under the subject Condefined in the General Conditions; including Documents, as modified by any change orders area of the Project for the use for which it is	g that the cos agreed to b	onstruction is sufficiently co	impleted in accordance with the Contract	
The DFCM - (Owner) accepts the Project of possession of the Project or specified area of				
The DFCM accepts the Project for occupancy utilities and insurance, of the Project subject				
The Owner acknowledges receipt of the follo ☐ As-built Drawings ☐ O & M Man		out and transition materials: Warranty Documents	☐ Completion of Training Requirements	
A list of items to be completed or corrected (Fresponsibility of the Contractor to complete changes thereof. The amount of completion of the punch list work.	all the Wo	rk in accordance with the C	ontract Documents, including authorized	
The Contractor shall complete or correct thecalendar days from the above date of istitems noted and agreed to shall be: \$has the right to be compensated for the delays the retained project funds. If the retained project funds are the right to be compensated for the delays the retained project funds.	and/or com	nis Certificate. The amount v If the list of items is not con- plete the work with the help of e insufficient to cover the dela	withheld pending completion of the list of impleted within the time allotted the Owner of independent contractor at the expense of	
CONTRACTOR (include name of firm)	by:	(Signature)	DATE	
A/E (include name of firm)	by:	(Signature)	DATE	
USING INSTITUTION OR AGENCY	by:	(Signature)	DATE	
	by:			
DFCM (Owner)		(Signature)	DATE	
4110 State Office Building, Salt Lake City, Utah telephone 801-538-3018 • facsimile 801-538-326		m.utah.gov	Parties Noted DFCM, Director	



Specifications for Safety and Security Film

1.0 Scope

This specification is for a shatter resistant and abrasion resistant window film which when applied to the interior window surface will help hold broken glass together and reduce the ultra-violet light that normally would enter through the window. Sun Control types additionally will provide heat and glare reduction. The film shall be $3M_{TM}$ Scotchshield_{TM} S25NVAR400 Ultra Safety and Security Window Film.

2.0 Applicable Documents

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

The 1985 American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Handbook of Fundamentals

The American National Standards Institute (ANSI).

ANSI Z97 Specification for Safety Glazing Material used in Buildings

Sec 5.1 Impact Test: 100-ft/lb. minimum Sec 5.3 Intensified Weathering

The American Society for Testing and Materials (ASTM) publication:

ASTM E-308 Standard Recommended Practice for Spectrophotometry and Description of Colorin CIE 1931 System

ASTM E-903 Standard Methods of Test for Solar Absorbance, Reflectance and Transmittance of Materials Using Integrating Spheres

ASTM D-1044 Standard Method of Test for Resistance of Transparent Plastics to Surface Abrasion (Taber Abrader Test)

ASTM G-90 Standard Practice for Performing Accelerated Outdoor Weatherizing for Non-metallic Materials Using Concentrated Natural Sunlight

ASTM E-84 Standard Method of Test for Surface Burning Characteristics of Building Materials

ASTM D-1004 Standard Method of Test for Resistance of Transparent Plastics to Tearing (Graves Tear Test)

ASTM F-1642-96 Standard Method of Test for Glazing and Glazing Systems Subject to Airblast Loadings, as adapted by the U.S. Government GSA Test Standard Protocols

The Consumer Products Safety Commission (CPSC)

CFR16, Part 1201 Safety Standards for Architectural Glazing Material

Impact Performance Accelerated Weathering

Window 4.1. A Computer Tool for Analyzing Window Thermal Performance, Lawrence Berkeley Laboratory

3.0 Requirements of the Film

3.1 **Film Material - Ultra Night Vision:** The film material shall consist of an optically clear multilayered polyester film laminated to a metallized multi-layered polyester film. Another film layer is added for color and performance (S25NVAR400), with a durable acrylic abrasion resistant coating over the surface. The film color is derived from the metal coating and additional layer and is stable.

The metallic coating shall be uniform without noticeable pinholes, streaks, thin spots, scratches or banding. The film shall have a nominal thickness of 5.0 mils (0.0050 inches). There shall be no evidence of coating voids. The film shall be identified as to Manufacturer of Origin (hereafter to be called Manufacturer).

- 3.2 **Emissivity:** The emissivity of the non-adhesive surface of the film shall be 0.87 nominal when measured using a Devices & Services Emissometer Model AE at or near room temperature. The Manufacturer shall provide laboratory data of emissivity and calculated window "U" Values for various outdoor temperatures based upon established calculation procedure defined by the 1985 ASHRAE Handbook of Fundamentals, Ch. 27., or Lawrence Berkeley Laboratory Window 4.0 Computer Program
- 3.3 **U Value:** The U Value of the film applied to 1/4" (6mm) clear glass shall be .82 nominal when measured in accordance with test procedures described in 3.2 for Emissivity.
- 3.4 **Transmission Visible:** When applied to 1/4" (6mm) clear glass, the luminous transmittance shall be 24% nominal when measured with an integrating sphere spectrophotometer as referenced by ASTM E-903 and calculated per ASTM E-308 using Standard Source "C" for average daylight.
- 3.5 **Reflection Visible**: When applied to 1/4" (6mm) clear glass, the total luminous reflection from the glass surface shall be 28% nominal when measured with an integrating sphere spectrophotometer as referenced by ASTM E-903 and calculated per ASTM E-308 using Standard CIE Source "C" for average daylight.
- 3.6 **Transmission Ultraviolet Light**: When applied to 1/4" (6mm) clear glass, the total transmission of solar ultraviolet radiation of air mass = 2 over the spectral range of 3000 to 3800 angstroms shall not exceed <2% when measured with an integrating sphere spectrophotometer as referenced by ASTM E-903.
- 3.7 **Shading Coefficient**: When applied to 1/4" (6mm) clear glass, the shading coefficient shall be 0.43 nominal when solar energy transmittance and reflection are measured per ASTM E-903 and the shading coefficient is computed in accordance with the established procedures defined by The ASHRAE Handbook of Fundamentals.

- 3.8 **Adhesive System**: The film shall be supplied with a high mass pressure sensitive weatherable acrylate adhesive applied uniformly over the surface opposite the abrasion resistant coated surface. A water soluble de-tackifier shall be incorporated over the pressure sensitive adhesive to facilitate handling. The adhesive shall be essentially optically flat and shall meet the following criteria:
- a. Viewing the film from a distance of ten feet at angles up to 45 degrees from either side of the glass, the film itself shall not appear distorted.
- b. It shall not be necessary to seal around the edges of the applied film system with a lacquer or other substance in order to prevent moisture or free water from penetrating under the film system.
- 3.9 **Flammability**: The Manufacturer shall provide independent test data showing that the window film shall meet the requirements of a Class A Interior Finish for Building Materials for both Flame Spread Index and Smoked Development Values per ASTM E-84.
- 3.10 **Abrasion Resistance**: The Manufacturer shall provide independent test data showing that the film shall have a surface coating that is resistant to abrasion such that, less than 5% increase of transmitted light haze will result in accordance with ASTM D-1044 using 100 cycles, 500 grams weight, and the CS10F Calbrase Wheel.
- 3.11 **Tear Resistance**: The film shall meet a minimum tear resistance value of >780 (lbs. x %) when measured in accordance with ASTM D-1004 (Graves Area Tear Test) at 20 inches/minute (508 mm/minute).
- 3.12 **Safety Glazing**: The film, when applied to either side of the window glass, shall pass a 400 ft/lb. impact when tested according to CPSC CFR16, Part 1201 and shall pass the accelerated weathering test requirements for both tensile strength and peel strength.
- 3.13 **Large Scale Explosive Blast Testing**: The film, when applied to 1/4-inch (6 mm) glass shall meet a minimum performance level of 3 when open-air blast tested to a minimum of 4.0 PSI with 25/msp peak-over pressure and tested according to GSA Test Standard Protocols. This is an adaptation of ASTM F1642-96.
- 3.14 **Tensile Strength**: The film shall have an average tensile strength of 30,000 PSI when tested in accordance with ASTM D882-95a.
- 3.15 **Young's Modulus (PSI)**: The film shall have a Young's Modulus of no greater than 500,000 PSI when tested in accordance with ASTM D-882-95a
- 3.16 **PPT (Puncture Propagation Tear)**: The film shall have an average PPT value of 7.5 lbs. when tested in accordance with ASTM D-2582-93.
- 3.17 **Elongation**: The film shall have an average elongation of 140% when tested in accordance with ASTM D-2582-95a.
- 3.18 **Break Strength (1 inch per width)**: The film shall have average break strength of 30 lbs.per mil of film thickness.

4.0 Requirements of the Authorized Dealer/Applicator (ADA)

4.1 The ADA shall provide documentation that the ADA is certified by the Manufacturer of the window film to install said window film as per the Manufacturer's specifications and in accordance with specific requests as to be determined and agreed to by the customer.

The ADA must:

- *Provide proof of liability insurance to the customer's requirement
- *Provide proof of Workman's Compensation Insurance
- *Provide workers information for security and background check
- *Provide reports from Better Business Bureau or other consumer protection agencies to provide customer with assurances of fair, honest and ethical business history
- 4.2 Authorization of dealership may be verified through the company's 3M ID Number.
- 4.3 The ADA will provide a commercial building reference list of ten (10) properties 5 of which were installed 5 years or more from current date, where the ADA has installed 3M Scotchshield Safety and Security Window Film and Ultra Flex attachment.

This list will include the following information:

- * Name of building
- * The name and telephone number of a management contact
- * Type of glass
- * Type of film
- * Amount of film installed
- * Date of completion
- 4.4 Upon request, the ADA will provide a "Mock Up" or sample window of the proposed material and ultra flex attachment for review, and acceptance, as part of the bid process.
- 4.5 Upon request, the ADA will provide an application analysis to determine available energy cost reduction and savings.

5.0 Requirements of the Manufacturer

- 5.1 The Manufacturer will insure proper quality control during production, shipping and inventory, clearly identify and label each film core with the product designation and run number.
- 5.2 The Manufacturer will, upon request and pre-approval, provide 100% financing for the complete installation of the window film to the end-user customer in either an installment purchase or lease purchase format to be decided upon by customer.
- 5.3 Materials shall be manufactured by:

3M Consumer Safety and Light Management Department

3M Center, Building 223-02-S-24

St. Paul, MN 55144-1000

6.0 Application

6.1 **Examination**: Examine glass surfaces to receive new film and verify that they are free from defects and imperfections, which will affect the final appearance. Correct all such deficiencies before starting film application.

6.2 Preparation:

- a. The window and window framing will be cleaned thoroughly with a neutral cleaning solution. The inside surface of the window glass shall be bladed with industrial razors to insure the removal of any foreign contaminant's.
- b. Toweling or other absorbent material shall be placed on the window sill or sash to absorb moisture accumulation generated by the film application.

6.3 Installation:

The film shall be applied as to the specifications of the Manufacturer by an ADA.

- a. Materials will be delivered to the job site with the manufacturer's labels intact and legible.
- b. To minimize waste, the film will be cut to specification utilizing a vertical dispenser designed for that purpose. Film edges shall be cut neatly and square at a uniform distance of 1/8" (3 mm) to 1/16" (1.6 mm) of the window-sealing device.
- c. Clear, clean water will be used to remove the water soluble overcoat that protects the pressure sensitive adhesive. Water and film slip solution only will be used on the window glass to facilitate the proper positioning of the film.
- d. To insure efficient removal of excess water from the underside of the film and to maximize bonding of the pressure sensitive adhesive, polyplastic bladed squeegees will be utilized.
- e. Upon completion, the film shall have a dimpled appearance from residual moisture. Said moisture shall, under reasonable weather conditions, dry flat with no moisture dimples within a period of 60 calendar days when viewed under normal viewing conditions.
- f. After installation, any left over material will be removed and the work area will be returned to original condition. Use all necessary means to protect the film before, during and after the installation.

7.0 Cleaning

The film may be washed using common window cleaning solutions, including ammonia solutions, 30 days after application. Abrasive type cleaning agents and bristle brushes, which could scratch the film, must not be used. Synthetic sponges or soft cloths are recommended.

8.0 Warranty

8.1 The application shall be warranted by the film manufacturer (3M) for a period of ten (10) years in that the film will maintain solar reflective properties without cracking, crazing, delaminating, peeling, or discoloration. In the event that the product is found to be defective under warranty, the film manufacturer will replace such quantity of the film proved to be defective, and will additionally provide the removal and reapplication labor free of charge.

- 8.2 The film manufacturer also warrants against glass failure due to thermal shock fracture of the glass and/or seal failure of the window unit (maximum value \$500 per window) provided the film is applied to recommended types of glass and the failure occurs within sixty (60) months from the start of application. Any glass failure or seal failure must be reviewed by the film manufacturer prior to replacement.
- 9.0 Requirement for Structural Silicone
- 9.1 Dow Corning 995 Silicone Structural Adhesive one-part, self priming, shelf-stable, neutral-cure, ready-to-use Elastomeric material specifically formulated for silicone structural glazing, exhibiting the following unique features:
 - Excellent unprimed adhesion to glass, anodized aluminum, 3M films and several paints
 - Cures to extremely tough Elastomeric rubber
 - Once cured, this adhesive forms a durable, flexible, watertight bond.

3M Scotchshield Ultra High Performance Safety and Security Window Film Sun Control

- 1.0 Scope **\$25NVAR400**
- 3.1 Thickness (mils) 5.0 (inches) 0.0050
- 3.2 Emissivity 0.72
- 3.3 U Value .82
- 3.4 Transmission Visible 24%
- 3.5 Reflection Visible 28%
- 3.6 Transmission Ultraviolet <1%
- 3.7 Shading Coefficient 0.43
- 3.11 Tear Resistance > 780 lbs.%
- 3.12 Safety Glazing 400 ft/lbs Category II
- 3.13 Air Blast Testing Yes Minimum Level 3 @ 4.0 PSI
- 3.14 Tensile Strength 30,000 PSI
- 3.15 Young's Modulus (PSI) < 500k PSI
- 3.16 PPT (Puncture 7.5 lbs. Propagation Tear)
- 3.17 Elongation 140%
- 3.18 Break Strength (Per inch width) 120 lbs.